
SECTION 110.10 – MANDATORY REQUIREMENTS FOR SOLAR READY BUILDINGS

(a) Buildings listed below shall provide for the future installation of a solar electric or solar thermal system.

- 1. Single Family Residences.** 70 percent of the single family residences located in subdivisions with ten or more single family residences and where the application for a tentative subdivision map has been deemed complete, by the authority having jurisdiction, on or after January 1, 2014, shall comply with the requirements of Section 110.10(b) through 110.10(e).
- 2. Multi-Family Buildings.** Multi-family buildings with eight or more dwelling units or with a water heating system serving multiple dwelling units shall comply with the requirements of Section 110.10(b) through 110.10(d).
- 3. Nonresidential and Hotel/Motel Occupancies.** All nonresidential and hotel/motel occupancies with three stories or fewer shall comply with the requirements of Section 110.10(b) through 110.10(d).

(b) Solar Zone.

- 1. Minimum Area.** The solar zone shall have a minimum area as listed below. The required area may be divided into noncontiguous sections, with a minimum section area of 80 square feet. No dimension of the solar zone shall be less than five feet.

A. Single Family Residences. The solar zone shall have a minimum area of 250 square feet.

EXCEPTION to Section 110.10(b)1A: Single family residences with three stories or more and with a total floor area less than or equal to 2000 square feet shall have a solar zone with a minimum area of 150 square feet.

B. Multi-Family Buildings. The solar zone shall have a minimum area equal to 30 percent of the total roof area excluding any skylight area.

EXCEPTION to Section 110.10(b)1B: A reserved space for the future installation of a solar electric or solar thermal system with an area equal to 45 percent of the total roof area may be located elsewhere on the building site in lieu of the solar zone.

C. Nonresidential and Hotel/Motel Occupancies. The solar zone shall have a minimum area equal to 40 percent of the total roof area excluding any skylight area.

EXCEPTION to Section 110.10(b)1C: A reserved space for the future installation of a solar electric or solar thermal system with an area equal to 60 percent of the total roof area may be located elsewhere on the building site in lieu of the solar zone.

EXCEPTION to Section 110.10(b)1: The area of any permanent solar electric or solar thermal system installed on the building site, including non-roof installations, at the time of construction shall be counted as part of the solar zone minimum area requirement.

NOTE: The solar zone shall comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 (California Fire Code) or in any similar requirements adopted by a local jurisdiction.

- 2. Orientation.** All sections of the solar zone shall be either oriented between 150 degrees and 270 degrees or located on a flat roof.

3. Shading.

A. No roof obstructions, including but not limited to, vents, chimneys, architectural features, and roof mounted equipment, shall be located in the solar zone.

B. The solar zone shall be located at a minimum distance, from any obstruction that projects above the point on the solar zone that is closest to the obstruction, that is two times the height difference of the obstruction and the lowest point of the solar zone. Obstructions subject to this requirement include:

- i. Any vent, chimney, architectural feature, roof mounted equipment or other obstruction that is on the roof or any other part of the building.
- ii. Any part of the neighboring terrain.
- iii. Any existing neighboring building or structure or any planned neighboring building or structure known to the building permit applicant.
- iv. Any telephone or other utility pole that is closer than thirty feet from the nearest point of the solar zone.
- v. Any existing landscaping on the building lot or neighboring lots or any planned landscaping on the building lot or neighboring lots known to the building permit applicant.

EXCEPTION to Section 110.10(b)3: Any obstruction oriented north of all points on the solar zone.

4. **Structural Integrity.** The as-designed roof dead load and live load for the solar zone shall be clearly indicated on the construction documents.

(c) Interconnection Pathways.

1. The construction documents shall indicate a pathway for routing of conduit from the solar zone to the main electrical service panel.
2. The construction documents shall indicate a pathway for routing of plumbing from the solar zone to the water heater.

(d) Documentation. A copy of the construction documents or a comparable document indicating the information from Section 110.10(b) through Section 110.10(c) shall be left for the occupant.

(e) Main Electrical Service Panel.

1. The main electrical service panel shall have a minimum busbar rating of 200 amps.
2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation.

A. Location. The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

B. Marking. The reserved space shall be permanently marked as “For Future Solar Electric”.